

AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0061] with the following amended paragraph.

[0061] Initial particle cloud **CL1** is induced to flow along channel **216** in the hopping and surfing modes discussed above. As the particle cloud flows along the channel, a gradient develops across the cloud where the finest particles will move toward the top of the cloud and the larger particles will move toward the bottom of the cloud. As the initial particle cloud continues to travel along the channel, the gradient will substantially stabilize. Eventually, a stabilized particle cloud reaches aperture array **228** and a selective portion of the initial particle cloud is gated or otherwise urged into and through apertures **232** of the aperture array. The size and electrical configuration of gates **236** disposed along each of the apertures can be optimized to gate particles within or below a pre-determined size range, as will be discussed hereinafter. As a result, a particle cloud **CL2** having particles primarily in the ~~fine~~ finer range is transported along channel **216** for further processing, finer sorting or any other desired use. Also, a new particle cloud **CL3** is formed in channel **218** that primarily includes particles in the finer and finest ranges. As particle cloud **CL3** is urged along channel **218** by electrostatic traveling waves from grid **224**, a stable size gradient once again develops across particle cloud **CL3**. Upon reaching aperture array **230**, a selective portion of particle cloud **CL3** is gated or otherwise urged into and through apertures **232** of aperture array **230**. Once again, the size and electrical configuration of the gates disposed along each of the apertures can be optimized to gate particles within or below a pre-determined size range into channel **220** to form particle cloud **CL4**. The remainder of particle cloud **CL3**, now primarily formed of particles in the ~~fine~~ finer range, can be delivered along channel **218** for further processing, additional sorting or any other desired use. Similarly, particle cloud **CL4** can be delivered along channel **220** for further processing, additional sorting or other uses. It will be appreciated that a system in accordance with the present invention can take any suitable shape, configuration or arrangement, and can include any number of channels and aperture arrays as desired to suitably transport and sort particles.